



# C 356BEE

Stereo Integrated Amplifier

ENGLISH



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Owner's Manual

# IMPORTANT SAFETY INSTRUCTIONS

## SAVE THESE INSTRUCTIONS FOR LATER USE.

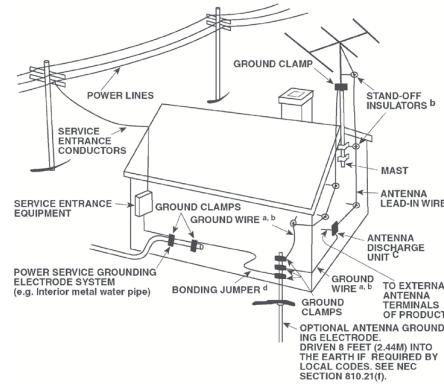
## FOLLOW ALL WARNINGS AND INSTRUCTIONS MARKED ON THE AUDIO EQUIPMENT.

- 1 Read instructions** - All the safety and operating instructions should be read before the product is operated.
- 2 Retain instructions** - The safety and operating instructions should be retained for future reference.
- 3 Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.
- 4 Follow Instructions** - All operating and use instructions should be followed.
- 5 Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with a dry cloth.
- 6 Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 7 Water and Moisture** - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 8 Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- 9**  A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
- 10 Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 11 Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. The primary method of isolating the amplifier from the mains supply is to disconnect the mains plug. Ensure that the mains plug remains accessible at all times. Unplug the AC power cord from the AC outlet if the unit will not be used for several months or more.
- 12 Grounding or Polarization** - This product may be equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 13 Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**14 Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

## NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



**15 Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power line surges.

**16 Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

**17 Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

**18 Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

**WARNING: THE APPARATUS SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING, AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE APPARATUS. AS WITH ANY ELECTRONIC PRODUCTS, USE CARE NOT TO SPILL LIQUIDS INTO ANY PART OF THE SYSTEM. LIQUIDS CAN CAUSE A FAILURE AND/OR A FIRE HAZARD.**

**19 Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

**20 Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

**21 Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**22 Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

**23 Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

**24 Headphones** - Excessive sound pressure from earphones and headphones can cause hearing loss.

**25 Battery Disposal** - When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area. Batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.

## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

## CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAYBE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.



## CAUTION

Changes or modifications to this equipment not expressly approved by NAD Electronics for compliance could void the user's authority to operate this equipment.

## CAUTION REGARDING PLACEMENT

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) that is equal to or greater than shown below.

Left and Right Panels: 10 cm

Rear Panel: 10 cm

Top Panel: 10 cm

## IMPORTANT SAFETY INSTRUCTIONS

### NOTES ON ENVIRONMENTAL PROTECTION



At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging, point this out.

The materials can be reused in accordance with their markings. Through re-use, recycling of raw materials or other forms of recycling of old products, you are making an important contribution to the protection of our environment. Your local administrative office can advise you of the responsible waste disposal point.

### INFORMATION ABOUT COLLECTION AND DISPOSAL OF WASTE BATTERIES (DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF EUROPEAN UNION) (FOR EUROPEAN CUSTOMERS ONLY)



Batteries bearing any of these symbols indicate that they should be treated as "separate collection" and not as municipal waste. It is encouraged that necessary measures are implemented to maximize the separate collection of waste batteries and to minimize the disposal of batteries as mixed municipal waste.



**Pb**

**Hg**

**Cd**

End-users are exhorted not to dispose waste batteries as unsorted municipal waste. In order to achieve a high level of recycling waste batteries, discard waste batteries separately and properly through an accessible collection point in your vicinity. For more information about collection and recycling of waste batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

By ensuring compliance and conformance to proper disposal of waste batteries, potential hazardous effects on human health is prevented and the negative impact of batteries and waste batteries on the environment is minimized, thus contributing to the protection, preservation and quality improvement of the environment.

**NOTE: THE C 356BEE IS NOT AN AUTO VOLTAGE UNIT. CONNECT ONLY TO THE PRESCRIBED AC OUTLET, I.E., 120V 60HZ OR 230V 50HZ.**

### RECORD YOUR MODEL NUMBER (NOW, WHILE YOU CAN SEE IT)

The model and serial number of your new C 356BEE are located on the back of the cabinet. For your future convenience, we suggest that you record these numbers here:

Model no:.....  
Serial no:.....

### UNPACKING AND SETUP

#### WHAT'S IN THE BOX

Packed with your C 356BEE you will find:

- The SR 8 remote control with 2 (two) AA batteries
- This owner's manual
- A detachable mains power cord

#### SAVE THE PACKAGING

Please save the box and all of the packaging in which your C 356BEE arrived. Should you move or otherwise need to transport your C 356BEE, this is by far the safest container in which to do so. We've seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton, so please: Save that box!

#### CHOOSING A LOCATION

Choose a location that is well ventilated (with at least several inches to both sides and behind), and that will provide a clear line of sight, within 23 feet/7 meters, between the C 356BEE's front panel and your primary listening/viewing position. This will ensure reliable infrared remote control communications. The C 356BEE generates a modest amount of heat, but nothing that should trouble adjacent components. It is perfectly possible to stack the C 356BEE atop other components, but the reverse usually should be avoided.

It is especially important that sufficient ventilation be provided. If you are contemplating locating the C 356BEE within a cabinet or other furniture, consult your NAD audio/video specialist for advice on providing adequate airflow.

#### NOTES ON INSTALLATION

Your C 356BEE should be placed on a firm, level surface. Avoid placing the unit in direct sunlight or near sources of heat and damp. Allow adequate ventilation. Do not place the unit on a soft surface like a carpet. Do not place it in an enclosed position such a bookcase or cabinet that may impede the airflow through the ventilation slots. Make sure the unit is switched off before making any connections.

The RCA sockets on your C 356BEE are colour coded for convenience. Red and white are Right and Left audio respectively. Use high quality leads and sockets for optimum performance and reliability. Ensure that leads and sockets are not damaged in any way and all sockets are firmly pushed home.

For best performance, use quality speaker leads of 16 gauge (1.5mm<sup>2</sup>) thickness or more. Switch off the POWER switch if you intend not to use the C 356BEE for long periods of time (such as when on vacation).

Should water get into your C 356BEE, shut off the power to the unit and disconnect the plug from the mains power source. Have the unit inspected by a qualified service technician before attempting to use it again.

#### DO NOT REMOVE THE COVER; THERE ARE NO USER-SERVICEABLE PARTS INSIDE.

Use a dry soft cloth to clean the unit. Do not use solutions containing benzol or other volatile agents.

### BARE WIRES AND PIN CONNECTORS



**WARNING:** The terminals marked with this symbol are hazardous live. External wiring connected to these terminals requires installation by an instructed person or the use of ready-made leads or cords.

Bare wires and pin connectors should be inserted into the hole in the shaft of the terminal. Unscrew the speaker terminal's plastic bushing until the hole in the screw shaft is revealed. Insert the pin or bare cable end into the hole and secure the cable by tightening down the terminal's bushing. Ensure bare wire from the speaker cables does not touch the back panel or another socket. Ensure that there is only ½ inch (1cm) of bare cable or pin and no loose strands of speaker wires.

### QUICK START

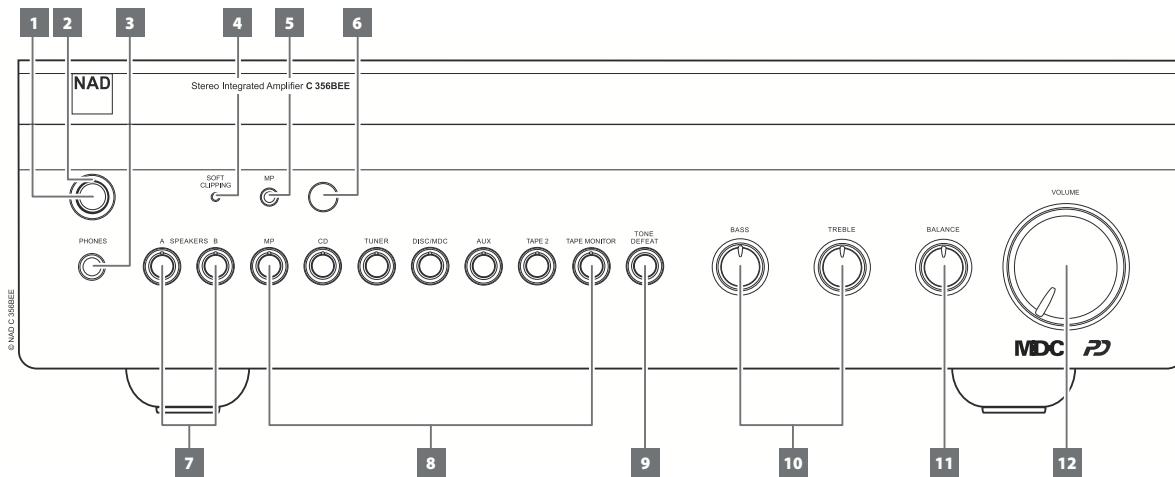
In case you simply cannot wait to experience the performance of your new C 356BEE, we provide the following "QUICK START" instructions to get you underway.

Please make all the connections to your C 356BEE with the unit unplugged from the mains power source. It is also advisable to power down or unplug all associated components while making or breaking any signal or AC power connections.

- 1 Connect your speakers to the LEFT and RIGHT speaker terminals and input sources to the applicable rear panel input sockets.
- 2 Connect the mains power cord to the C 356BEE's AC Mains input and then plug into a mains power source.
- 3 Set the rear panel POWER switch to the "ON" setting. The Standby LED indicator embedded around the bezel of the STANDBY button will illuminate amber and the C 356BEE goes to standby mode.
- 4 Press the front panel STANDBY button to turn ON the C 356BEE. The Standby LED indicator will turn from amber to blue.
- 5 Select preferred active Source input by pressing the corresponding front panel input selector button.

# IDENTIFICATION OF CONTROLS

## FRONT PANEL



**1 STANDBY BUTTON:** With the rear panel POWER switch set to ON position, press this button to switch ON the C 356BEE from standby mode. The Standby LED indicator will turn from amber to blue. Pressing the STANDBY button again turns the unit back to standby mode.

The C 356BEE can also be switched ON from standby mode by pressing any of the front panel buttons.

**2 STANDBY LED:** This indicator will light up amber when the C 356BEE is at standby mode. When the C 356BEE is powered up from standby mode, this indicator will illuminate blue. When infrared command from the SR 8 is received, this indicator will also flash momentarily.

In cases of serious abuse of the C 356BEE, such as excessively low loudspeaker impedance and short circuit, the C 356BEE will engage its Protection circuitry, indicated by the Standby LED turning from blue to red and the sound being muted.

In such a case, turn OFF the C 356BEE via the rear panel POWER switch. Wait for it to cool down and/or check the speaker connections. Once the cause for the protection circuitry to engage has been removed, set the rear panel POWER switch to the "ON" setting. Then press the front panel STANDBY button to resume normal operation.

**3 PHONES:** A 1/4" stereo jack socket is supplied for headphone listening and will work with conventional headphones of any impedance. The headphone socket will work in parallel with the selected speakers. To listen to headphones only, de-select SPEAKERS A and/or B. The volume, tone and balance controls are operative for headphone listening. Use a suitable adapter to connect headphones with other types of sockets, such as 3.5mm "personal stereo" jack plugs.

### NOTE

*Make certain that the volume control is turned to minimum (fully counterclockwise) before connecting or disconnecting headphones. Listening at high levels can damage your hearing.*

**4 SOFT CLIPPING INDICATOR:** This indicator is illuminated blue if the rear panel SOFT CLIPPING switch is set to ON position. Refer also to the item below about SOFT CLIPPING at the IDENTIFICATION OF CONTROLS – REAR PANEL.

**5 MP SOCKET:** Using a 3.5mm stereo plug, connect into this socket the audio output of a Media Player.

### NOTES

- If an external Media Player is connected to the front MP socket (using a 3.5mm stereo plug) while listening to a MP line-level source, the external Media Player will be directly selected with the MP line-level source immediately disconnected.*
- It is recommended to mute the volume or switch to a different input before plugging/unplugging the external Media Player cable.*

**6 REMOTE SENSOR:** Point the SR 8 remote control at the remote sensor and press the buttons. Do not expose the remote sensor of the C 356BEE to a strong light source such as direct sunlight or illumination. If you do so, you may not be able to operate the C 356BEE with the remote control.

**Distance:** About 23ft (7m) from the front of the remote sensor.

**Angle:** About 30° in each direction of the front of the remote sensor.

**7 SPEAKERS A, B:** The SPEAKERS A and B buttons engage or disengage the speakers connected respectively to the SPEAKERS A and SPEAKERS B terminals on the rear panel. Press "A" to switch ON or OFF the speakers connected to the SPEAKERS A terminals. Press "B" to switch ON or OFF the speakers connected to the SPEAKERS B terminals. Press both "A" and "B" to engage at the same time both SPEAKERS A and SPEAKERS B. The corresponding blue LED indicator embedded around the SPEAKERS A and SPEAKERS B buttons will illuminate accordingly when each or both are engaged.

**8 INPUT SELECTORS:** These buttons select the active input to the C 356BEE and the signal sent to the loudspeakers, headphones and the PRE OUT sockets. The corresponding buttons on the remote control handset duplicate these buttons. When selected, the corresponding input LED indicator embedded around the bezel of the particular input button will illuminate blue.

**MP (MEDIA PLAYER):** Selects a line-level source connected to the MP sockets as the active input.

If an external Media Player is connected to the front MP socket (using a 3.5mm stereo plug) while listening to a MP line-level source, the external Media Player will be directly selected with the MP line-level source immediately disconnected. It is recommended to mute the volume or switch to a different input before plugging/unplugging the external Media Player cable.

**CD:** Selects the CD player (or other line-level source) connected to the CD sockets as the active input.

**TUNER:** Selects the tuner (or other line-level source) connected to the tuner sockets as the active input.

**DISC/MDC:** Selects a line-level source connected to the DISC sockets. If an optional Modular Design Construction (MDC) module is installed, the DISC input socket is disabled and the MDC source is selected as the active input.

**AUX:** Selects a line-level source connected to the AUX sockets as the active input.

**TAPE 2:** Selects TAPE 2 as the active input.

**TAPE MONITOR:** Selects the output from a tape recorder when playing back tapes or monitor recordings that are being made through the TAPE MONITOR sockets.

TAPE MONITOR does not override the current input selection. For example, if CD is the active input when TAPE MONITOR is selected, then the CD signal will continue to be selected and sent to both the TAPE 2 and TAPE MONITOR output sockets, but it is the sound from recorder connected to TAPE MONITOR that will be heard in the loudspeakers. Apart from the TAPE MONITOR LED illuminated to indicate it is engaged, the corresponding LED indicator for the active input will also stay illuminated.

**9 TONE DEFEAT:** Tone Controls are enabled or disabled by pressing this button. When enabled (TONE DEFEAT LED indicator is illuminated), the Tone Control circuits are bypassed. The Tone Control circuits are active when the TONE DEFEAT LED indicator stays extinguished.

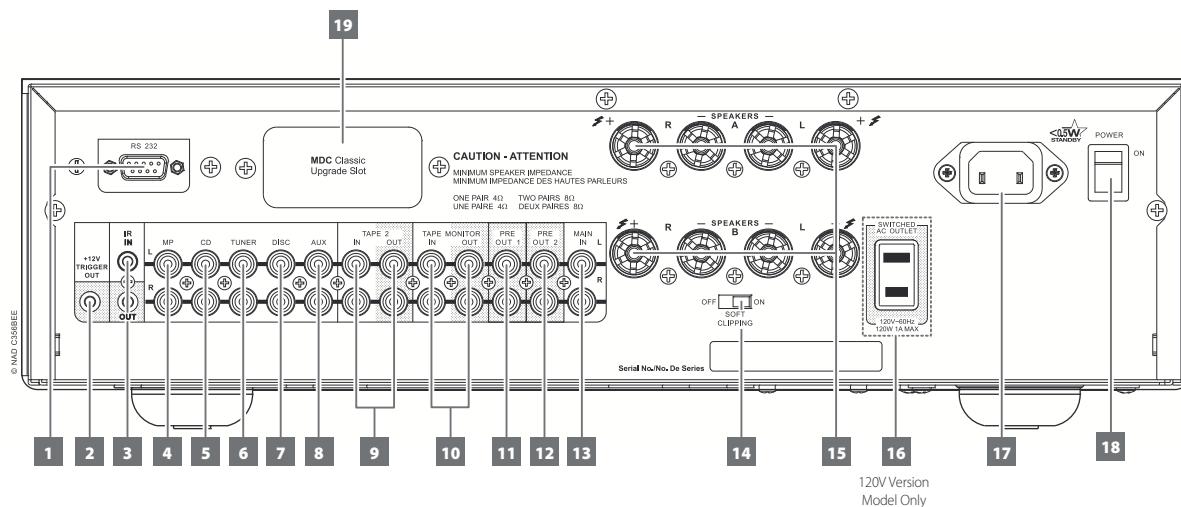
**10 TONE CONTROLS:** The C 356BEE is fitted with BASS and TREBLE tone controls to adjust the tonal balance of your system. The 12 o'clock position is "flat" with no boost or cut, and an indent indicates this position. Rotate the control clockwise to increase the amount of Bass or Treble. Rotate the control counterclockwise to decrease the amount of Bass or Treble. The Tone controls do not affect recordings made using the TAPE output terminals but will affect the signal going to the Pre-amp output terminals (PRE OUT 1 and PRE OUT 2).

**11 BALANCE:** The BALANCE control adjusts the relative levels of the left and right speakers. The 12 o'clock position provides equal level to the left and right channels. A detent indicates this position. Rotating the control clockwise moves the balance towards the right. Rotating the control counterclockwise moves the balance to the left. The BALANCE control does not affect recordings made using the TAPE output terminals but will affect the signal going to the Pre-amp output terminals (PRE OUT 1 and PRE OUT 2).

**12 VOLUME:** The VOLUME control adjusts the overall loudness of the signals being fed to the loudspeakers or headphones. Turn clockwise to increase the volume level; counter clockwise to lower it. The VOLUME control does not affect recordings made using the TAPE output terminals but will affect the signal going to the Pre-amp output terminals (PRE OUT 1 and PRE OUT 2).

# IDENTIFICATION OF CONTROLS

## REAR PANEL



### ATTENTION!

Please make sure that the C 356BEE is powered off or unplugged from the mains power source before making any connections. It is also advisable to power down or unplug all associated components while making or breaking any signal or AC power connections.

**1 RS-232:** Connect this interface using RS-232 serial cable (not supplied) to any Windows® compatible PC to allow remote control of the C 356BEE via compatible external controllers. NAD is a certified partner of AMX and Crestron and fully supports these external devices. Check out the NAD website for information about AMX and Crestron compatibility with NAD. See your NAD audio specialist for more information.

**2 12V TRIGGER OUT:** The +12V TRIGGER OUT is used for controlling external equipment that is equipped with a +12V trigger input. This output will be 12V when the C 356BEE is ON and 0V when the unit is either OFF or in standby. This output can drive a load up to 150mA at 12V.

**3 IR IN/OUT:** These mini-jacks accept and output remote-controlled codes in electrical format, using industry-standard protocols, for use with "IR-repeater" and multi-room systems and related technologies.

**IR IN:** This input is connected to the output of an IR (infrared) repeater (Xantech or similar) or the IR output of another component to allow control of the C 356BEE from a remote location.

**IR OUT:** When connected to the IR IN of an ancillary equipment, direct the ancillary equipment's own remote control to the C 356BEE's infrared receiver to command or control the linked unit.

All NAD products with IR IN/IR OUT features are fully compatible with the C 356BEE. For non-NAD models, please check with your other product's service specialists with respect to its compatibility with the C 356BEE's IR features.

**4 MP INPUT:** Input for a Media Player or other line-level signal source. Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of a Media Player.

### NOTE

If an external Media Player is connected to the front MP socket (using a 3.5mm stereo plug) while listening to a MP line-level source, the external Media Player will be directly selected with the MP line-level source immediately disconnected.

**5 CD INPUT:** Input for a CD player or other line-level signal source. Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of a CD player.

**6 TUNER INPUT:** Input for a tuner or other line-level signal source. Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of a tuner.

**7 DISC INPUT:** Input for additional line level input signals such as CD, Mini Disc player or the output signal from a step-up amplifier for a turntable. Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of the auxiliary device.

### NOTE

If an optional Modular Design Construction (MDC) module is installed, the DISC input socket is disabled and the MDC source is selected as the active input.

**8 AUX INPUT:** Input for additional line level input signals such as another CD player. Use a twin RCA-to-RCA lead to connect these sockets to the left and right analog output of the auxiliary device.

**9 TAPE 2 IN/OUT:** Connections for analog recording and playback to a tape recorder of any type. Using twin RCA-to-RCA leads, connect the left and right "Audio Output" of the tape recorder to the TAPE 2 IN sockets for playback. Connect the left and right "Audio Input" of the tape recorder to the TAPE 2 OUT sockets for recording.

**10 TAPE MONITOR IN/OUT:** Connections for analog recording and playback to a secondary tape recorder of any type. Using twin RCA-to-RCA leads, connect the left and right "Audio Output" of the tape recorder to the TAPE MONITOR IN sockets for playback and tape monitoring. Connect the left and right "Audio Input" of the tape recorder to the TAPE MONITOR OUT sockets for recording.

#### TO MAKE A RECORDING

When any source is selected, its signal is also fed directly to any tape recorder connected to the TAPE 2 OUT or TAPE MONITOR OUT for recording.

#### TAPE TO TAPE COPYING

You can copy between two tape recorders connected to your C 356BEE. Put the source tape in the recorder connected to TAPE 2 and the blank tape into the recorder connected to TAPE MONITOR. By selecting TAPE 2 input you can now record from TAPE 2 to TAPE MONITOR and monitor the signal coming from the original tape.

#### NOTE

*There will be no TAPE 2 output when TAPE 2 is the selected source input. This prevents feedback through the recording component thereby preventing possible damage to your speakers. The same applies to TAPE MONITOR IN/OUT.*

**11 PRE OUT 1:** The PRE OUT 1 sockets can be used to drive an additional power amplifier. Use a twin RCA-to-RCA lead to connect the left and right "Audio Input" of the Power amplifier or processor to the PRE OUT 1 sockets.

Always turn the C 356BEE and associated external power amplifiers OFF before connecting or disconnecting anything to the PRE OUT 1 sockets. The PRE OUT 1 output signal will be affected by the C 356BEE's volume and tone control settings.

**12 PRE OUT 2:** Connections to an external power amplifier or processor, such as a surround-sound decoder. In normal use, this should be connected to the MAIN IN sockets with the links supplied. To connect your C 356BEE to an external processor or amplifier, remove first these links. Use a twin RCA-to-RCA lead to connect the left and right "Audio Input" of a power amplifier or processor to the PRE OUT 2 sockets.

Always turn the C 356BEE and associated external power amplifiers OFF before connecting or disconnecting anything to the PRE OUT 2 sockets. The PRE OUT 2 output signal will be affected by the C 356BEE's volume and tone control settings.

**13 MAIN IN:** Connections to an external preamplifier or processor, such as a surround sound decoder. In normal use, this should be connected to PRE OUT 2 sockets with the links supplied. To connect your C 356BEE to an external processor or preamplifier, remove first these links. Use a twin RCA-to-RCA lead to connect the left and right "Audio Output" of the preamplifier or processor to the MAIN IN sockets.

Always turn the C 356BEE and associated external preamplifiers OFF before connecting or disconnecting anything to the MAIN IN sockets.

**14 SOFT CLIPPING™:** Enables NAD's proprietary Soft Clipping circuitry on all channels. At [ON] position, Soft Clipping gently limits the output of the C 356BEE to minimize audible distortion should the amplifier be over driven. Soft Clipping may simply be left ON at all times to reduce the likelihood of audible distortion from excessive volume settings. However, for critical listening and to preserve optimum dynamics, you may wish to defeat it by setting this switch to "OFF" position.

The SOFT CLIPPING indicator on the front panel will illuminate when the C 356BEE is in Soft Clipping mode. Refer also to the item below about "POWERDRIVE".

#### POWERDRIVE

The C 356BEE uses NAD's proprietary PowerDrive™ amplifier technology that provides high dynamic power and low impedance drive capability. By adding a second high-voltage rail to our well regulated high-current power supply, we get an "overdrive" that can nearly double the continuous power on a short term dynamic power basis. This uniquely efficient power supply topology provides the real world benefits of high dynamic power that remains uncompromised by low impedance speakers.

**15 SPEAKERS A, B:** The C 356BEE is equipped with two sets of speaker connectors. Use the SPEAKERS A terminals for the "main" speakers and use the SPEAKERS B terminals for a second pair, for example, extension speakers located in another room.

Connect the right speaker to the terminals marked "R +" and "R -" ensuring that the "R+" is connected to the "+" terminal on your loudspeaker and the "R-" is connected to the loudspeaker's "-" terminal. Connect the terminals marked "L +" and "L -" to the left speaker in the same way.

Always use heavy duty (16 gauge; 1.5mm<sup>2</sup> or thicker) stranded wire to connect loudspeakers to your C 356BEE. The high-current binding post terminals can be used as a screw terminal for cables terminating in spade or pin sockets or for cables with bare wire ends.

**16 SWITCHED AC OUTLET (120V version only):** This convenience outlet can supply switched power to another component or accessory. With the POWER switch at the rear panel set to ON position, this outlet is powered ON or OFF by the front panel STANDBY switch or by the SR 8's [ON/OFF] buttons. The total draw of all devices connected to this outlet must not exceed 120 watts.

**17 AC MAINS INPUT:** The C 356BEE comes supplied with a separate detachable mains power cord. Before connecting the plug to the mains power source, ensure that it is firmly connected to the C 356BEE's AC Mains input socket first. Connect only to the prescribed AC outlet, i.e., 120V 60 Hz (for 120V version models of C 356BEE only) or 230V 50 Hz (for 230V version models of C 356BEE only). Always disconnect the mains power plug from the mains power source first, before disconnecting the cable from the C 356BEE's AC Mains input socket.

**18 POWER SWITCH:** The POWER switch supplies the master mains power for the C 356BEE. When this switch is at ON position, the C 356BEE is in standby mode as shown by the amber status condition of the standby LED. Toggle the front panel's STANDBY button to switch ON the C 356BEE or back to standby mode. Switch off the POWER switch if you intend not to use the C 356BEE for long periods of time (such as when on vacation). It is not possible to switch ON the C 356BEE using the front panel STANDBY button or SR 8 remote control's [ON] button if the rear panel POWER switch is switched off.

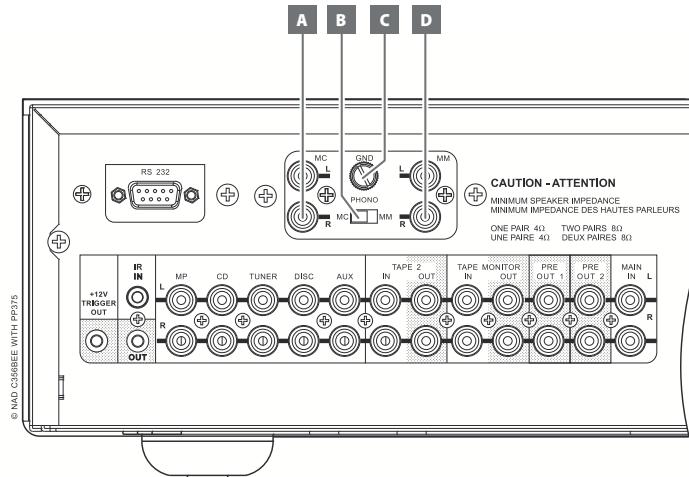
# IDENTIFICATION OF CONTROLS

## REAR PANEL

**19 MDC CLASSIC UPGRADE SLOT:** Remove cover to install the optional Modular Design Construction (MDC) module. An example of a C 356BEE-compatible MDC Classic module is the PP 375 Phono Preamplifier module. The PP 375 is integrated into the chassis of the C 356BEE, automatically assigned to the DISC input and its level well matched to the other sets of line level input.

Consult with your NAD dealer on how to procure the PP 375 and its consequent installation to the C 356BEE. Check out also the NAD website for any announcement about future release(s) of other C 356BEE-compatible MDC Classic modules.

With the optional PP 375 installed, refer below for descriptions of key PP 375 parts.

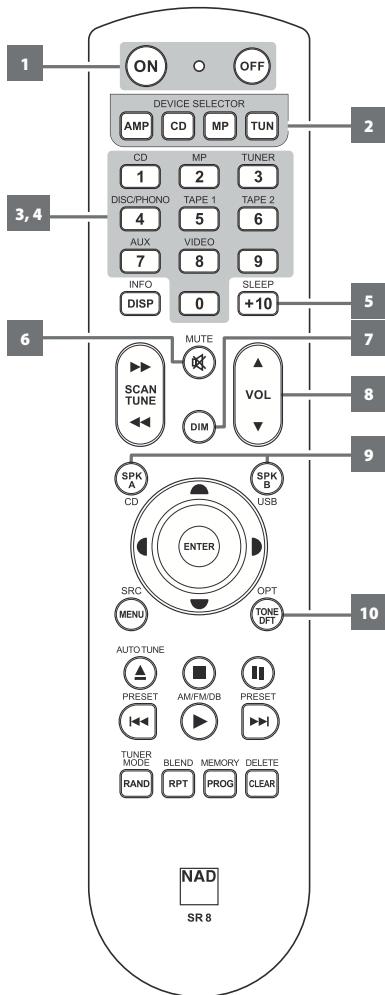


**A MC INPUT:** Input for a Moving Coil phono cartridge. Connect the twin RCA lead from your turntable to this input if you are using a Moving Coil cartridge.

**B MC-MM SWITCH:** Slide this switch to either MM (Moving Magnet) or MC (Moving Coil) depending upon the Phono cartridge being used.

**C PHONO GROUND CONNECTOR:** Turntables normally includes a single wire earth lead. Use the C 356BEE Phono ground connector to connect this lead. Unscrew the terminal to expose the hole, which will accept the lead. After insertion, tighten the terminal to secure the lead.

**D MM INPUT:** Input for a Moving Magnet Phono cartridge. Connect the twin RCA lead from your turntable to this input if you are using a Moving Magnet cartridge.



## USING THE SR 8 REMOTE CONTROL

The SR 8 remote control handset handles the key functions of the C 356BEE as well as other NAD Stereo Receivers, Integrated Amplifiers and Preamplifiers. It has additional controls to remotely operate NAD CD Players, AM/FM Tuners and dedicated AM/FM/DB Tuners. It will operate up to a distance of 23ft (7m). Alkaline batteries are recommended for maximum operating life. Two AA batteries should be fitted in the battery compartment at the rear of the Remote Control handset. When replacing batteries, check that they have been put in the right way round, as indicated on the base of the battery compartment.

When a command from the remote control is received, the Standby LED indicator will blink. Note that the indicator may also blink when receiving commands not necessarily for the C 356BEE but for other components in the system. Please refer to previous sections of the manual for a full description of individual functions.

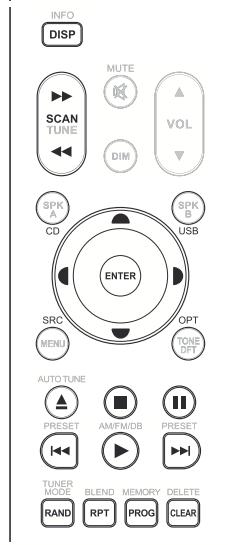
## NOTE

*The remote control handset supplied with the C 356BEE is of universal type designed to operate several NAD models. Some buttons are applicable only to specific NAD models. Contact your dealer or NAD audio specialist for assistance.*

- 1 POWER ON, OFF:** The SR 8 remote has a separate ON and OFF button. With the rear panel POWER switch set to ON position, press the ON button to switch the C 356BEE from Standby mode to operating mode. Press the OFF button to switch the unit to Standby mode.
- 2 DEVICE SELECTOR:** A Device Selector button determines only what component the SR 8 will command; it does not perform any function on the C 356BEE. Press desired Device Selector button for the applicable buttons to be directed to a "page" of commands relevant to the selected device. Upon selecting a Device, you can now press the corresponding SR 8 control buttons applicable for the selected Device.
- 3 INPUT SELECTORS:** Refer to the corresponding labels printed in the remote control faceplate and their respective assigned buttons to make use of these functions. Set the DEVICE SELECTOR to "AMP" in order to gain access to these buttons. The input selector buttons perform the same functions as the buttons labeled the same on the front panel.
- 4 NUMERIC KEYS:** The numeric keys allow for direct input of tracks for CD players, and direct channel/preset access for tuners and receivers.
- 5 SLEEP:** Switch off the NAD Receiver or Tuner after a preset number of minutes.
- 6 MUTE:** Press the [MUTE] button to temporarily switch OFF the sound to the speakers and headphones. MUTE mode is indicated by the Standby LED indicator flashing for NAD Integrated Amplifiers or "Mute" shown in the VFD of NAD Receivers. Mute does not affect recordings made using the TAPE output terminals but will affect the signal going to the PRE OUT terminals. Press [MUTE] again to restore sound.
- 7 DIM (for use with compatible NAD Stereo Receiver, Tuner and CD Player):** Reduce, turn off or restore VFD brightness. Depending on the NAD model, the brightness of the front panel display will vary when you toggle this button.
- 8 VOL ▲/▼:** Press [VOL ▲/▼] button to increase or decrease the loudness level. Release the button when the desired level is reached. For NAD Receivers, the VFD will also show "Volume Up" or "Volume Down" while pressing SR 8's [VOL ▲/▼] buttons. The VOLUME buttons do not affect recordings made using the TAPE output terminals but will affect the signal going to the PRE OUT terminals.
- 9 SPK A, SPK B:** The [SPK A] and [SPK B] buttons engage or disengage the speakers connected respectively to the SPEAKERS A and SPEAKERS B terminals. Toggle [SPK A] to switch ON or OFF the speakers connected to the SPEAKERS A terminals. Toggle [SPK B] to switch ON or OFF the speakers connected to the SPEAKERS B terminals. Press both buttons to engage both speakers.
- 10 TONE DFT:** Tone Controls are enabled or disabled by pressing this button.

# IDENTIFICATION OF CONTROLS

## SR 8 REMOTE CONTROL



**CD PLAYER CONTROL (for use with compatible NAD CD Player):** Set the DEVICE SELECTOR to "CD" in order to gain access to these buttons. Some of the control buttons below are applicable only to specific NAD CD Player models; check the owner's manual of your NAD CD Player for control button compatibility. You can also load the applicable NAD code library to this device so that it can be made compatible with your other NAD equipment. Refer to the section below about "USING THE SR 8 REMOTE CONTROL LIBRARY" on how to load a NAD code library.

**SCAN [◀◀/▶▶]:** Fast reverse/forward search.

**[▲]:** Open or close disc tray.

**[■]:** Stop playback.

**[III]:** Pause playback temporarily.

**[▶▶I]:** Go to next track/file.

**[◀◀I]:** Go to beginning of current track/file or to previous track/file.

**[▶]:** Start playback.

**[▲/▼]:** Select through folder list/Select through WMA/MP3 files.

**ENTER:** Select desired folder or WMA/MP3 file.

**DISP:** Show playback time and other display information.

**RAND:** Play tracks/files in random order.

**RPT:** Repeat track, file or whole disc.

**PROG:** Enter or exit program mode.

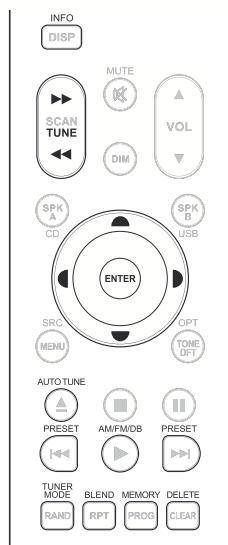
**CLEAR:** Delete track or file number from the program list.

**CD:** Select CD as the active source.

**USB:** Select USB as the active source.

**OPT:** Select optical input as the active source.

**SRC:** Select desired SRC mode.



**TUNER CONTROL (for use with compatible NAD Receiver, AM/FM/DB Tuner):** Set the DEVICE SELECTOR to "TUN" in order to gain access to these buttons. Refer to the corresponding labels printed in the remote control faceplate and their respective assigned buttons to make use of these functions. Some of the control buttons below are applicable only to specific NAD Receiver or Tuner models; check the owner's manual of your NAD Receiver or Tuner for control button compatibility. You can also load the applicable NAD code library to this device so that it can be made compatible with your other NAD equipment. Refer to the section below about "USING THE SR 8 REMOTE CONTROL LIBRARY" on how to load a NAD code library.

**AUTO TUNE:** Automatically scan all available local DAB broadcasts.

**TUNE [◀◀/▶▶] or [◀/▶]:** Tune forward or backwards.

**PRESET [◀◀/▶▶] or [▲/▼]:** Step up or down Preset numbers.

**AM/FM/DB:** Select XM, DAB, FM or AM band as applicable.

**TUNER MODE:** Activate "FM Mute On" or "FM Mute Off" at FM mode. In combination with [◀/▶], select through applicable XM or DAB menu options.

**BLEND:** Engage or disengage BLEND feature.

**MEMORY:** Save current station into a preset number.

**DELETE:** Delete selected preset number or all preset numbers.

**[◀/▶]:** In combination with TUNER MODE or other compatible buttons, select through applicable XM or DAB menu options.

**ENTER:** Select Preset or Tune mode at AM/FM band. Display signal strength at DAB mode.

**INFO:** Show display information as supplied by the currently tuned RDS station, XM channel or DAB broadcast.

**USING THE SR 8 REMOTE CONTROL LIBRARY**

The SR 8 can store a different library of default NAD codes for each of its DEVICE SELECTOR "pages." If the original default library does not control your NAD CD player, DVD player, or other component, follow the procedure below to change the library code. Refer as well to the table below for a list applicable NAD Library Codes with their corresponding NAD models.

**LOAD ANOTHER LIBRARY CODE**

**Example:** Load NAD DVD Player T 517 library code to SR 8's "CD" device.

- 1 Press and hold [CD] in the DEVICE SELECTOR section of SR 8.
- 2 While holding down the device button (CD), press "2" and "2" using SR 8's numeric buttons. "22" is the corresponding library code for T 517.
- 3 Press [ENTER] while still holding down the device button (CD). The CD device selector will flash once to indicate that the library input is successful. Both the device selector button (CD) and [ENTER] can now be released.

**RESET THE SR 8 TO ITS DEFAULT SETTINGS**

The SR 8 can be restored to its factory settings, including default libraries, by the following procedures

- 1 Press and hold [ON] and [DELETE/CLEAR] buttons for about 10 seconds until the AMP device button lights up.
- 2 Within two seconds of the AMP device button lighting up, release both buttons. If the reset mode is successful, the [CD] device button will flash twice.

**TABLE OF LIBRARY CODES APPLICABLE TO SR 8 REMOTE CONTROL**

LIBRARY CODE	NAD PRODUCT DESCRIPTION
10	Default library for "AMP" page
11	Zone 2
20	Default library for "CD" page; C 515BEE, C 545BEE, C 565BEE
21	T 535, T 585, M55, DVD section of L 54, VISO TWO, VISO FIVE
22	T 513, T 514, T 515, T 517
23	T 587, T 557, T 577, M56
30	IPD 1
31	IPD 2
40	Default library for "TUN" page; Tuner section of C 725BEE, T 175, T 737, T 747, T 755, T 765, T 775, T 785
41	C 422, C 425
42	C 445

**NOTE**

*The SR 8 may not necessarily contain all the control buttons applicable for the above-mentioned NAD products. Use the prescribed remote control of the specific NAD product for a full compliment of the applicable remote control buttons.*

## REFERENCE

### TROUBLESHOOTING

CONDITION	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<b>No sound.</b>	<ul style="list-style-type: none"> <li>Mains power cord unplugged or power not switched ON.</li> <li>TAPE MONITOR selected.</li> <li>Mute on.</li> <li>Rear PRE OUT/MAIN IN amp links not fitted.</li> </ul>	<ul style="list-style-type: none"> <li>Check if mains power cord is plugged in and power switched ON.</li> <li>De-select TAPE MONITOR mode.</li> <li>Switch off Mute.</li> <li>Fit links.</li> </ul>
<b>No sound one channel.</b>	<ul style="list-style-type: none"> <li>Balance control not centered.</li> <li>Speaker not properly connected or damaged.</li> <li>Input lead disconnected or damaged.</li> </ul>	<ul style="list-style-type: none"> <li>Center Balance control.</li> <li>Check connections and speakers.</li> <li>Check leads and connections.</li> </ul>
<b>No audio despite the presence of an active input at DISC rear panel input terminals.</b>	<ul style="list-style-type: none"> <li>DISC input is disabled due to an installed MDC module at the MDC Classic Upgrade slot.</li> </ul>	<ul style="list-style-type: none"> <li>Uninstall the MDC module from the MDC Classic Upgrade slot.</li> </ul>
<b>No audio despite the presence of an active input at MP rear panel input terminals.</b>	<ul style="list-style-type: none"> <li>An external Media Player is connected to the front MP socket.</li> </ul>	<ul style="list-style-type: none"> <li>Unplug the Media Player connected to the front MP socket.</li> </ul>
<b>Weak bass/diffused stereo image.</b>	<ul style="list-style-type: none"> <li>Speakers wired out of phase.</li> </ul>	<ul style="list-style-type: none"> <li>Check connections to all speakers in the system.</li> </ul>
<b>C 356BEE does not respond to remote control commands.</b>	<ul style="list-style-type: none"> <li>Battery flat or incorrectly inserted.</li> <li>Infrared receiver (IR) window of the C 356BEE or IR transmitter of the remote control is obstructed.</li> <li>IR receiver in direct sun or very bright ambient light.</li> </ul>	<ul style="list-style-type: none"> <li>Check or replace battery. Follow correct battery insertion setup.</li> <li>Check IR windows and ensure clear line-of-sight from remote control to C 356BEE.</li> <li>Place unit away from direct sun, reduce amount of ambient light.</li> </ul>
<b>Standby LED turns red during operation.</b>	<ul style="list-style-type: none"> <li>C 356BEE has overheated.</li> <li>Overall impedance of loudspeakers too low.</li> </ul>	<ul style="list-style-type: none"> <li>Shut down C 356BEE by turning off the rear panel POWER switch. Ensure that there is adequate space below, above and to the sides of the C 356BEE to allow proper air flow. After C 356BEE has cooled down, turn back ON. Restart again the C 356BEE by switching ON the rear panel POWER switch and then pressing the front panel STANDBY button or remote control's [ON] button.</li> <li>Ensure the overall loudspeaker impedance is not below 4 ohms.</li> </ul>

**PREAMPLIFIER SECTION****LINE LEVEL INPUT, PRE OUT**

THD <sup>1</sup> 20 Hz – 20 kHz, CCIF IMD, SMPTE IMD, DIM 100	<0.005 % at 2 V out
Signal-to-Noise Ratio	>106 dB (IHF; A-weighted, ref. 500 mV out, unity gain)
	>114 dB (A-weighted, ref. 2 V out, Volume maximum)
	>92 dB (ref. 100 mV out, unity gain)
Channel separation -1 kHz	>80 dB
10 kHz	>68 dB
Input impedance (R and C)	22 kohms+ 100 pF
Maximum input signal	>6 Vrms (ref. 0.1 % THD)
Output impedance - Pre out	80 ohms
Tape out	Source Z + 1 kohm
Input sensitivity	166 mV (ref. 500 mV out)
Frequency response	±0.3 dB (20 Hz - 20 kHz, Tone defeat ON) ±0.3 dB (20 Hz - 20 kHz, Tone defeat OFF)
Maximum voltage output -IHF load	>10 V (ref. 0.03 % THD)
600 ohms load	>8 V (ref. 0.03 % THD)

**TONE CONTROLS**

Treble	±5 dB at 10 kHz
Bass	±8 dB at 100 Hz

**POWER AMPLIFIER SECTION****MAIN IN, SPEAKER OUT**

Continuous output power into 8 ohms and 4 ohms (Stereo)	>80 W (at rated THD, 20 Hz-20 kHz, both channels driven)
Rated THD <sup>1</sup> 20 Hz – 20 kHz, CCIF IMD, SMPTE IMD, DIM 100	<0.007 %
Clipping power	>90 W (at 1 kHz 0.1 % THD)
IHF dynamic headroom - 8 ohms	+2.6 dB
4 ohms	+4.4 dB
IHF dynamic power - 8 ohms	145 W
4 ohms	220 W
2 ohms	290 W
Peak output current	>50 A (in 1 ohm, 1 ms)
Signal-to-noise ratio	>101 dB (A-weighted, ref. 1 W)
	>120 dB (A-weighted, ref. 80 W)
Damping factor	>100 (at 8 ohms, 50 Hz and 1 kHz)
Frequency response	±0.3 dB (ref. 20 Hz - 20 kHz) 3 Hz – 70 kHz (ref. -3 dB)
Input impedance	20 kohms + 1 nF
Input sensitivity	950 mV (for 80 W in 8 ohms)
Voltage gain	29 dB
Headphone output impedance	220 ohms
Channel separation - 1 kHz	>80 dB
10 kHz	>70 dB

**TRIGGER OUT**

Output resistance	75 ohms
Output current	150 mA
Output voltage	+12 V ± 10 %

# REFERENCE

## SPECIFICATIONS

### PHONO SECTION (WITH OPTIONAL PP 375 INSTALLED)

MM/MC IN, PRE OUT

Input impedance - MC	100 ohms (R) 180 pF (C)
MM	47 kohms (R) 180 pF (C)
Input sensitivity <sup>2</sup> for 80 W in 8 ohms - MC	0.38 mV 1 kHz MM 5.0 mV 1 kHz
Input sensitivity <sup>2</sup> for 1 W in 8 ohms - MC	39 uV 1 kHz MM 0.56 mV 1 kHz
Input overload - MC	0.6 mV/5.9 mV/58 mV (20 Hz/1 kHz/20 kHz) MM 9.3 mV/85 mV/850 mV (20 Hz/1 kHz/20 kHz)
Gain - MC in - TAPE OUT <sup>3</sup>	57.0 dB (at 1 kHz, 10 kohms load) MM in - TAPE OUT 34.2 dB (at 1 kHz, 10 kohms load)
THD1 (CCIF IMD, DIM 100)	<0.009 % (20 Hz – 20 kHz, 4 Vrms TAPE OUT)
Signal-to-Noise Ratio, IHF A-weighted - MC <sup>4</sup>	>78 dB (ref. 0.5 mV input, 10 ohms source) MM <sup>5</sup> >75 dB (ref. 5 mV input, IHF cartridge source)
RIAA response accuracy	±0.5 dB (20 Hz – 50 Hz) ±0.3 dB (50 Hz – 20 kHz)
Infrasonic filter	-3 dB at 10 Hz -14 dB at 4 Hz
Channel Separation - MC	>60 dB (1 kHz and 10 kHz)
MM	>60 dB (1 kHz and 10 kHz)

### OVERALL SPECIFICATIONS

#### LINE LEVEL INPUT, SPEAKER OUT

Continuous output power into 8 ohms and 4 ohms (Stereo)	>80 W (at rated THD, 20 Hz-20 kHz, both channels driven)
THD <sup>1</sup> 20 Hz – 20 kHz, CCIF IMD, SMPTE IMD, DIM 100	<0.009 % (250 mW to 80 W, 8 ohms and 4 ohms)
Signal-to-Noise Ratio	>92 dB (IHF; A-weighted, 500 mV input, ref. 1 W out in 8 ohms)
Frequency response	>110 dB (IHF; A-weighted, ref. 80 W in 8 ohms, maximum volume) ±0.3 dB (20 Hz – 20 kHz, Tone Defeat ON) 10 Hz – 65 kHz (-3 dB)
Channel separation - 1 kHz	>80 dB
10 kHz	>68 dB

#### POWER CONSUMPTION

Rated power	350 W (at 230 V AC 50 Hz; 120V AC 60 Hz)
Standby power	<0.5 W
Idle power	<40 W

### DIMENSION AND WEIGHT

Unit Dimensions (W x H x D) Gross <sup>6</sup>	435 x 131 x 337 mm 17 1/8 x 5 3/16 x 13 5/16 inches
Net weight	8.7 kg (19.2 lbs)
Shipping weight	10.6 kg (23.4 lbs)

#### LEGEND:

1 THD is the sum of all the harmonic components within the 80 kHz measurement bandwidth and does not include noise.

2 Measured from Speaker Out.

3 Measured with 10 ohms generator impedance.

4 Measured with 10 ohms input termination.

5 Measured with MM cartridge connected (600 mH + 600 ohms).

6 Gross dimensions include feet, volume knob and tightened speaker terminals.

Specifications are subject to change without notice. For updated documentation and features, please log onto [www.NADelectronics.com](http://www.NADelectronics.com) for the latest information about C 356BEE.



[www.NADElectronics.com](http://www.NADElectronics.com)

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C 356BEE Owner's Manual Issue 1.9-07/10

# NAD

## C 356BEE DAC Integrated Amplifier



Our C 356BEE DAC with the new MDC DAC built in, symbolises NAD's desire for continual improvement—even on an award-winning design. We have refined our amplifier performance and added more value to our C 356BEE DAC design by applying knowledge gained from our top-of-the-line Masters Series M3 Amplifier. Able to drive the most complex loud speakers to their full musical potential, the C 356BEE DAC can challenge amplifiers costing two to three times more. With features like Preamp Out, Modular Design Construction, and the MDC DAC's ability to play computer music, this amp will suit your requirements for years to come.

**FDP** 2 x 80W  
Full Disclosure Power

**MDC** Modular Design Construction

**PD**

<0.5W STANDBY

### Features

#### > Purely Digital

With our C 356BEE DAC, the world of computer music can be heard through your hi-fi system without the noise or distortion that commonly plagues analogue designs. Thanks to an 'asynchronous USB' technique and its high precision clock, 24/96 quality computer music flows smoothly without 'jitter' or harsh distortion. You can also plug Apple TV into the C 356BEE DAC to hear iTunes like never before!

#### > Modular Design Construction (MDC)

The C 356BEE DAC, equipped with our MDC DAC Digital Analogue Converter, allows computer music to be streamed from your computer or networked storage device without musical compromise. MDC makes future upgrades possible with interchangeable modules!

#### > Legendary Technology

Our NAD PowerDrive circuit delivers very high dynamic power and low impedance drive to accurately control loudspeakers, resulting in musically detailed, coherent, and relaxed sound. PowerDrive™ offers the capability of an amplifier twice as

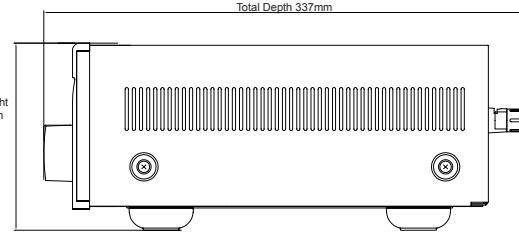
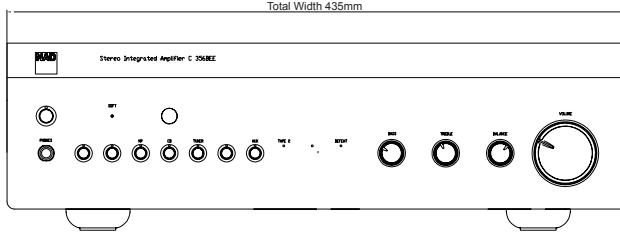
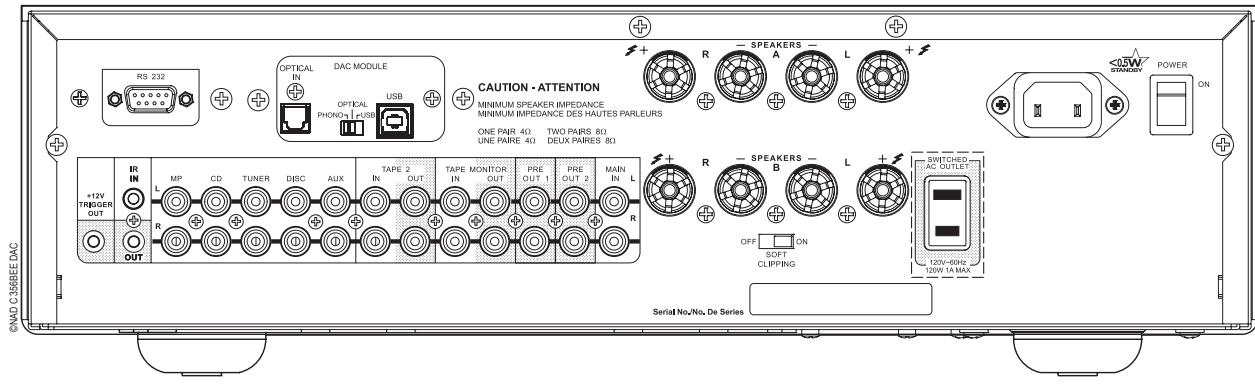
powerful without the energy drainage. Our exclusive Soft Clipping feature protects speakers (and ears) from damaging clipping distortion.

#### > Real World Power

With 80W of continuous power (both channels), our C 356BEE DAC has the lowest levels of distortion and noise available in its price class. We use the most demanding criterion for performance measurement—Full Disclosure Power—measuring distortion under the most extreme conditions of low impedance loads and frequency extremes, rather than the easy 1kHz @ 8 ohms test used by many of our competitors.

#### > Greener NAD

The C 356BEE DAC offers <0.5W standby consumption and includes a convenient 'vacation' switch. We make every effort to reduce our environmental impact by manufacturing the C 356BEE DAC without heavy metals and other hazardous substances, and by using recycled and recyclable materials where possible.



## Specifications

C 356BEE DAC	
LINE IN, SPEAKER OUT	
Continuous output power into 8 Ω and 4 Ω (Stereo)	>80W (at rated THD, 20Hz-20kHz, both channels driven)
THD* 20Hz - 20kHz, CCIF IMD, SMPTE IMD, DIM 100	<0.009% (250mW to 80W, 8 Ω and 4 Ω)
Clipping Power	>90W (at 1kHz 0.1% THD)
IHF Dynamic Headroom	8 Ohms 4 Ohms
IHF Dynamic Power	+2.6dB +4.4dB
8 Ohms 4 Ohms 2 Ohms	145W 220W 290W
Signal/Noise Ratio	>92dB (IHF; A-weighted, 500mV input, ref. 1W out in 8 Ω) >110dB (IHF; A-weighted, ref. 80W in 8 Ω, max. volume)
Frequency Response	±0.3dB (20Hz-20kHz, Tone Defeat ON) 10Hz - 65kHz (-3dB)
Channel Separation	1kHz 10kHz
	>80dB >68dB
<b>MDC DAC Module</b>	
Sample Rate	32kHz to 96kHz
THD+N	0.005%
Signal/Noise	-90dB (ref. 500mV Tape out)
Output Level	2V (at Tape out)
Inputs	
Digital	Optical USB 2.0 (Device side Asynchronous)
Digital to Analogue Converter	Burr-Brown TI PCM1796
<b>POWER CONSUMPTION</b>	
Standby Power	<0.5W
Idle Power	<40W
Rated Power	350W (230V AC 50Hz; 120V AC 60Hz)
<b>DIMENSION AND WEIGHT</b>	
Unit Dimensions (W x H x D) Gross**	435 x 130.86 x 337mm 17 1/8 x 5 3/16 x 13 5/16 inches***
Net Weight	9.8kg (19.6lbs***)
Shipping Weight	12.4kg (23.8lbs**)

\* THD is the sum of all the harmonic components within the 80kHz measurement bandwidth and does not include noise.

\*\* Gross dimensions include feet, buttons and rear panel terminals.

\*\*\* Non-metric measurements are approximate. NAD Electronics will not assume any liability for errors being made by retailers, custom installers, cabinet makers, or other end users based on information contained in this document.

Note: Installers should allow a minimum clearance of 55mm for wire/cable management.

# NAD

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[www.NADelectronics.com](http://www.NADelectronics.com)

# Garantie

NAD Electronics of America et Lenbrook/NAD Canada garantissent que la présente composante est exempte de tout vice de matériau et de fabrication selon les modalités suivantes :

**Composantes électroniques** (syntoniseurs, pré-amplificateurs, amplificateurs, amplificateurs intégrés, récepteurs, processeurs A/V et produits A/V intégrés) 2 ans, pièces et main-d'oeuvre

**Composantes électromécaniques** (lecteurs de cassette audio, lecteurs CD, enregistreurs et changeurs, lecteurs DVD, lecteur de Bluray et tables tournantes) 2 ans, pièces et main-d'oeuvre

La présente garantie est valide uniquement dans le pays où le produit a été acheté et n'est pas transférable. Elle est offerte en exclusivité à la personne ayant effectué l'achat, à l'origine, chez un dépositaire agréé de produits NAD. Seuls les dépositaires agréés peuvent se présenter en cette qualité, et l'acheteur peut vérifier la qualité du dépositaire agréé du marchand en communiquant avec NAD/Lenbrook au numéro suivant : 1-800-263-4641.

## Obligation de NAD :

Si, pendant la durée de la garantie, la composante NAD cesse de fonctionner correctement en raison d'un vice de fabrication, NAD/Lenbrook, à leur seule discrétion, répareront ou remplaceront celle-ci gratuitement.

## Pour une réparation :

Pour faire réparer le produit, veuillez l'apporter, avec la facture ou le coupon de caisse original, à votre dépositaire NAD. Si cet établissement n'est pas un centre de réparation NAD autorisé, il vous indiquera où se trouve le centre le plus proche. Vous pouvez aussi appeler au 1 800 263-4641 pour connaître l'emplacement du centre de réparation NAD agréé le plus proche.

## Ce qui nous payons :

Nous assumons tous les frais de main-d'oeuvre et de matériaux des articles garantis, mais ne payons pas les frais d'expédition si vous devez faire parvenir le produit à NAD/Lenbrook ou à un centre de réparation NAD agréé. Si les réparations sont couvertes par la garantie, NAD/Lenbrook ou le centre de réparation assumeront les frais de transport pour le retour de votre produit.

## Étendue de la garantie :

La présente garantie ne couvre pas les composantes :

1. endommagées dans le transport ou dans un cas de force majeure;
2. soumises à une trop forte charge, utilisées de façon abusive, mal utilisées ou combinées à un équipement défectueux ou inapproprié ou encore utilisées d'une manière contraire aux directives données dans le manuel accompagnant le produit;
3. réparées par du personnel non autorisé;
4. dont le numéro de série a été enlevé ou altéré.

LE GARANT NE POURRA, EN AUCUNE CIRCONSTANCE, ÊTRE TENU RESPONSABLE POUR LES DOMMAGES ACCESSOIRES, qu'ils résultent de l'inexécution d'une garantie explicite ou indirecte, d'un délit, d'une négligence ou d'une autre cause.

Certains états et certaines provinces ne permettent pas l'exclusion ou la limitation des dommages accessoires; il est possible que les limitations et exclusions ci-dessus ne s'appliquent pas à vous. La présente garantie vous accorde des droits reconnus par la loi. Il se pourrait que vous en ayez d'autres, qui peuvent varier d'un état ou d'une province à l'autre ou d'un pays à l'autre.

**IMPORTANT :** La garantie peut être différente d'un pays à un autre. Le distributeur local a tous les détails.

## AVERTISSEMENT

NE CONFIEZ PAS LA RÉPARATION DU PRODUIT À UNE PERSONNE NON AUTORISÉE. LES PIÈCES NÉCESSAIRES POUR VEILLER À CE QUE VOTRE PRODUIT FONCTIONNE COMME À L'ORIGINE NE PEUVENT ÊTRE OBTENUES QUE PAR L'ENTREMISE DES DÉPOSITAIRES ET DES DISTRIBUTEURS AGRÉÉS. LA PRÉSENTE GARANTIE EST NULLE SI L'ÉQUIPEMENT A ÉTÉ ALTÉRÉ OU SI DE PIÈCES INADÉQUATES ONT ÉTÉ UTILISÉES.

# Warranty

NAD Electronics of America and Lenbrook/NAD Canada warrants this component to be free from all defects in materials and workmanship as follows:

**Electronic components** (tuners, preamplifiers, amplifiers, integrated amplifiers, receivers, A/V processors, & integrated A/V products)

**2 years, parts & labor**

**Electro-mechanical products** (cassette decks, CD players, recorders & changers, DVD players, BD players and turntables)

**2 years, parts & labor**

This warranty is valid only in the country of purchase. This warranty is non-transferable, and is valid for the first, original purchaser purchasing from an Authorized Dealer of NAD products. Only Authorized Dealers represent themselves as such, and purchasers may confirm the status of Authorized Dealers by calling NAD/Lenbrook at 1-800-263-4641.

**What we will do:**

Should your NAD component fail to function properly due to a manufacturing defect, NAD/Lenbrook, at its sole discretion, will repair or replace it free of charge during the warranty period.

**How to obtain service:**

To obtain warranty service, please bring your unit along with the original invoice or bill of sale to your NAD dealer. If he is not an authorized NAD service center he will direct you to the nearest one or you may call 1-800-263-4641 for the location of the nearest NAD service center.

**Note:** The NAD warranty requires proof-of-purchase prior to any in-warranty repairs. Always retain your original sales slip.

**What we will pay for:**

We will pay all labor and material expenses for covered items, but you must pay any shipping charges if it is necessary to ship the product to NAD/Lenbrook or to an authorized NAD service center. If the repairs are covered by the warranty, NAD/Lenbrook or the service center will pay the return shipping charges.

**What is not covered:**

This warranty does not cover a component which has been:

1. Damaged in transit or by act of God;
2. Overloaded, abused, misused, or operated with faulty or unsuitable equipment, or contrary to instructions contained in the accompanying product manual;
3. Serviced by unauthorized personnel;
4. The serial number has been altered or removed.

IN NO EVENT SHALL THE WARRANTOR BE LIABLE FOR INCIDENTAL, OR CONSEQUENTIAL DAMAGES, whether damages resulting from breach of express or implied warranties, tort, negligence, or otherwise.

Some states (provinces) do not allow exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state (province) or between countries.

**IMPORTANT:** Warranty in other countries may vary. Contact your local distributor for details.

## WARNING

DO NOT ENTRUST ANY REPAIR WORK TO UNAUTHORIZED PERSONS. THE COMPONENTS NECESSARY TO MAINTAIN THE ORIGINAL PERFORMANCE OF THIS PRODUCT ARE AVAILABLE ONLY THROUGH AUTHORIZED DEALERS AND DISTRIBUTORS. THE WARRANTY WILL BE INVALIDATED IF THE EQUIPMENT IS TAMPERED WITH OR INCORRECT PARTS ARE SUBSTITUTED.